

C. D'OYLY H. APLIN, FIRST GOVERNMENT GEOLOGIST FOR THE
SOUTHERN DISTRICT OF QUEENSLAND

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On the 18th May, 1867, the Reverend George Wight delivered an address to the Queensland Philosophical Society with the title, "On the Appointment of a Government Geologist for Queensland". Wight was interested in geology, and his address, which was printed in the *Queensland Daily Guardian*, as was the custom of the Society at the time, was intended to stimulate some action in the matter. He was familiar with the functions of the Geological Survey of England, and praised the efficient organization of the Geological Survey of Victoria. In pressing the need for a similar scientific aid for the Colony of Queensland, he contended that "The appointment of a thoroughly practical geologist by the Government is, in our judgement, the best, cheapest, and speediest means of guiding and aiding the development of the vast natural resources of Queensland".

Following the first gold rush to Canoona, on the Fitzroy River in 1858, subsequent early gold discoveries in other parts of the Colony had been effective in drawing settlers, so that in the five years preceding 1867 the population of Queensland had trebled to over ninety thousand. In not fulfilling their early promise of richness these finds had, however, contributed little to raising Queensland from its depressed financial condition of the time. This situation changed dramatically in September, 1867, when payable alluvial gold was discovered at the Cape River, and this was soon followed by the rich find of James Nash at Gympie.

Wight's words were certainly timely, but there can be no doubt that the gold discoveries of that year, rather than his address, provided the stimulus for the appointment of professional geologists to work in the Colony. Richard Daintree, who had left the Geological Survey of Victoria in 1864 to settle in north Queensland and enter into pastoral and mining activities, was commissioned by the Government to examine the Cape River area. Subsequently in 1868 Daintree was appointed Government Geologist for the Northern District of Queensland, while Christopher D'Oyly Hale Aplin, also late of the Geological Survey of Victoria, was appointed Government Geologist for the Southern District.

Aplin was born in India, in 1819, the son of an army colonel, and a nephew of Sir James Brooke, Rajah of Sarawak. In 1842, with his brother Dyson, he emigrated from England to Victoria, and the brothers secured pastoral interests in the western districts of the Colony.

Seven years later he left Victoria for Labuan, and was a passenger on the brig *Freak* during the search for traces of the party of explorers left at the Pascoe River by Edmund Kennedy. It is recorded that when the remains of Thomas Wall and Charles Niblet were interred on Albany Island, Aplin read the burial service (Jack, 1922). It was his fate to be buried at the same site sixteen years later. In Labuan, where his uncle was Governor, Aplin held for a time the offices of Collector of Customs and Surveyor-General, and then went to England, where he studied geology under such renowned figures as Sir Charles Lyell and Sir Roderick Murchison.

On his return to Victoria in 1852 he joined his brother on the newly discovered goldfields. His association with the Geological Survey of Victoria began four years later and continued, except for a break during 1865 and 1866, when he entered on a brief career as a consulting geologist, until his appointment to the position in Queensland. Aplin was involved in the preparation of 23 quarter-sheets relating to the Victorian goldfields, and in 1864 he was Acting Director in the absence of A. R. C. Selwyn. His work was apparently regarded highly, and in their biographical sketch Dunn and Mahony (1910) quote words of high praise from Selwyn concerning the efforts of Aplin and G. H. F. Ulrich in connection with the mapping of the Castlemaine quarter-sheet.



CHRISTOPHER D'OYLY HALE APLIN

Aplin came to Queensland at the age of 49 years and an experienced geologist. He shared with Daintree the distinction of founding the Geological Survey of Queensland, although this title was not really applied to the organization until twenty years later. His period of active geological work in Queensland, however, was short—only twenty months. The results of his field work were presented in six published reports :

- (1) Report from the Government Geologist, South Queensland, on the Geological and Mining Features of the Gympie Gold Field. *Legislative Council Journal. Session 1 of 1868*, pp. 449-452 (Dated 2nd July, 1868).
- (2) Report of the Government Geologist of the Southern District. *Votes and Proceedings of the Legislative Assembly for the Session 1868-9*, pp. 605-8 (Dated 23rd October, 1868).
- (3) Report of the Government Geologist, Southern Division, *subtitled* Concluding report of the Government Geologist for the Southern Division, on the examination for gold, of the country south of the Bunya Bunya Range, including some observations on the gold deposits at Jimna and Gooroomjam. *Votes and Proceedings of the Legislative Assembly for the Session 1868-9*, pp. 619-25 (Dated 16th January, 1869).
- (4) Progress Report of the Government Geologist for South Queensland. *Votes and Proceedings of the Legislative Assembly, Session of 1869, 2*, pp. 155-7 (Dated 31st March, 1869).
- (5) Report on the Auriferous Country of the Upper Condamine, Embracing the "Diggings" at Talgai, Thanos Creek, Canal Creek and Lucky Valley. *Votes and Proceedings of the Legislative Assembly, Session of 1869, 2*, pp. 157-164, and map (Dated 21st July, 1869).
- (6) Report on the Geological and Mineral Features of a Part of the Southern and Northern Portions of the Burnett District, by the Government Geologist for South Queensland. *Votes and Proceedings of the Legislative Assembly, First Session of 1870*, pp. 295-301 (Dated 17th January, 1870).

More personal records of his labours are three of his field diaries and some of his fossil collection, which have been located in the Queensland Museum.

In any appreciation of Aplin's geological work in Queensland two things should be borne in mind. Firstly, it was directed towards establishing payable occurrences of gold, and secondly, little previous geological work had been carried out. Some geological observations had been made by the explorers Thomas Mitchell and Ludwig Leichhardt in their overland journeys, and later, between 1853 and 1855, Samuel Stutchbury, official Geologist for the Colony of New South Wales, reported on some aspects of the geology of the country between the southern part of the Darling Downs and the Fitzroy River. W. B. Clarke also briefly examined the Darling Downs in 1853. Following the separation of Queensland from New South Wales in 1859 there was no formal geological work until the commission of Daintree in 1867, although a few geological papers had been read to the Queensland Philosophical Society.

In his notes on the Gympie goldfield Aplin shows how much his interpretation of Queensland geology was to be influenced by his observations in Victoria. He thought the fossils (*Spirifer*, *Productus*, and *Aviculopecten*) were indicative of an Upper Silurian age and likewise saw a resemblance in the character of the reefs. He compared the older alluvia forming the "drift hills" with similar features at Bendigo, and suggested that they should be thoroughly examined.

While the richness of the gold impressed him, he did not favourably regard the prospects of a long life for the field, and in his report warned against the introduction of excessive quantities of machinery. Aplin assumed that the "greenstone", which had been encountered at shallow depth in many of the shafts, constituted an extensive intrusive mass, and the auriferous reefs associated with it would become both less productive and more difficult to exploit in deeper workings. However, even within twelve months of Aplin's report there were more hopeful indications of the persistence of the reefs (Hackett, 1869). Subsequently the Gympie field went on to produce nearly three and a half million ounces of gold in the ensuing 60 years of its existence, and some shafts extended down to over 3,000 feet. It is unfortunate that, in the history of gold-mining at Gympie, Aplin will be remembered chiefly by this early mistake in interpretation; his remarks were no doubt heavily tempered with caution in the light of the available evidence, with the disappointing experiences of earlier Queensland goldrushes prominent in his thoughts.

During the second half of 1868 Aplin examined the gold prospects of the country immediately north-west of Brisbane, along the eastern scarp of the D'Aguilar Range, and across via Kilcoy to the Jimna diggings. He prepared three reports on this work, but there is no evidence that the first was ever published. His diary shows that this report was submitted on 10th August, 1868, and would have dealt with country between Brisbane and Samford, including the Enoggera diggings, near the head of Kedron Brook. Jack (1892) included it in his list of Aplin's published reports, but admitted he had never seen it.

The field notes tell of the desperate efforts of Aplin and his party to discover payable gold along the D'Aguilar Range. Here the unrewarding nature of the work has been borne out by the subsequent history of mining in the area. There were other annoyances apart from the disappointing results of the search for gold. An entry of 28th July records in a forthright manner Aplin's feelings following the inability of Captain Townley of "Sandford" to sell the party salt beef, having no salt, and his refusal to let them have any fat to fry the small quantity of fresh meat he was able to give them. Such were the problems of life in the Queensland bush, with the capital of the Colony only sixteen miles away.

Several weeks were spent in the vicinity of Delaney's Creek and Neurum Neurum Creek, where traces of gold had been reported by Samuel Stutchbury, the Government Geological Surveyor of New South Wales, during his investigations in

1854. Here again the results were disappointing, and in his notes Aplin expressed doubts on the accuracy of some of Stutchbury's observations. His conclusion in his report is worth quoting, "And now I feel confidence in stating that any miner who may be induced by past rumours to prospect these creeks will find his time wasted and his labour thrown away."

The final phase of this programme related to the country around Kilcoy. The field notebook covering this part of the work has not been found, so the information is restricted to Aplin's third published report. The name Bunya Bunya Range, mentioned in the title of this report, referred to what is now known as the Brisbane and Jimna Ranges, and not the Bunya Mountains, north-east of Dalby.

This six months' work was associated with little of real value, although the Jimna and Gooroomjam fields supported a considerable number of miners over the ensuing few years. The survey was essentially a prospecting trip. There had not been sufficient time, in view of the difficult topography and geological complexity of the area, to prepare a geological map. Aplin made the point in his report that the labour would have been more fruitful, if the work of the geologist could have commenced at points where gold mining had been carried out.

This remark may have influenced the authorities at the beginning of 1869 to transfer his activities to the Warwick district, where gold had been worked spasmodically for about five years at Talgai, Canal Creek, Thanes Creek, and Lucky Valley. Six months were spent in the area, and the second and more comprehensive of the two reports emanating from this work constitutes Aplin's most significant contribution to Queensland geology. It was accompanied by a geological map (Plate 14), which also showed the location of the auriferous reefs.

In the western part of this area he divided the altered Palaeozoic sediments into two groups: a lower division, dominantly quartzites, regarded as Lower Silurian in age, and an upper division, slates and sandstones, regarded as Upper Silurian, but did not differentiate between them in the map. The adjacent freshwater Mesozoic sediments, which include some coal measures, were referred to the Carboniferous. Aplin believed in a direct association between mineralization and igneous activity, and considered the Lucky Valley-Elbow Gully area as more favourable for gold mineralization because of the proximity of intrusions. He recorded the occurrence of marine fossils near Elbow Gully and remarked on their similarity to those from Gympie. Sediments in the vicinity, that we now know to be partly Devonian and partly Permian in age, were referred collectively to the Upper Silurian.

On his return to Brisbane in mid-year Aplin had expected the survey to be discontinued, but he received instructions to work in the Peak Downs and Drummond Range areas and to proceed overland so that he could examine the country on the way. However he had travelled only as far north as Gin Gin when the work was terminated at the end of 1869.

On his journey northward he spent a day at Gowrie, collecting fossil bones for the "National Museum". Some of these specimens have been recognised in the collections of the Queensland Museum, and among them one jaw fragment of the large extinct marsupial carnivore, *Thylacoleo carnifex*, has been used in published work on that species.

In his report he provided geological notes of the country along the route, with those relating to the Boyne River headwaters possessing considerable detail. He described the Mount Perry copper lode and recommended deeper sinking to test it more adequately. His brother Dyson joined the party for some of the journey, and Aplin acknowledges his assistance in the field, especially in prospecting. Dyson Aplin had also been at Gympie, during the work there in the previous year, and later, in 1871, he served as Secretary to the Royal Commission on the Queensland Goldfields.

The opinion has been expressed by Bryan (1954) that Aplin's geological work in Queensland was overshadowed by that of his contemporary, Daintree. While this is certainly true, it should be remembered that Daintree's investigations in northern Queensland were of greater duration, and included more areas which developed into significant gold producers. Furthermore, greater travel opportunities enabled Daintree to produce the paper, entitled "Notes on the Geology of the Colony of Queensland", which was presented to the Geological Society of London in 1872, and is regarded as his greatest geological achievement.

Aplin's attitude to his work seems to have been determined by his experience in the Geological Survey of Victoria. He may have been better suited to carrying out more detailed work in restricted areas.

Following the termination of his appointment as Government Geologist for the Southern District, Aplin moved to Maryborough and purchased land for a sugar plantation. From June to September, 1871, he returned to Brisbane to work on the arrangement, labelling and cataloguing of the geological collections of the Queensland Museum, which was then housed in the old Parliamentary Building in Queen Street. This was at the time that control of the Museum was passing from the Queensland Philosophical Society to the Government and the beginning of its development as a public institution. His handwritten palaeontological catalogue of 203 specimens survives to the present day. Most of these fossils had been collected by Aplin and Hackett, a few by Daintree and A. C. Gregory. The bulk of the fossil collection of Daintree had been sent abroad for study by Robert Etheridge, and these specimens were not included in this catalogue, but were added to the Queensland Museum several years later.

Following an unsuccessful approach by Aplin for suitable remuneration for his work, the small vote of £100 for the project having been virtually exhausted on materials, he was asked to hand over the collections to Charles Coxen. This public figure had been largely the driving force in the Queensland Philosophical

Society for the assembly of collections and the foundation of a museum. Aplin then returned to his property Iwood, at Owanyilla, south of Maryborough. He apparently remained unpaid for his services, for a motion that he receive £70 was defeated in the Legislative Assembly in July of the following year.

Little is known of Aplin's activities until he took up his last official appointment, that of Police Magistrate in charge of the settlement of Somerset, near Cape York, some two years later. He was apparently interested in the geology of the newly discovered tin-mining area around Stanthorpe, because T. F. Gregory, a Mineral Land Commissioner, quoted (1873) notes supplied by him on the geology of the country at the head of the Severn River, and the mode of occurrence of the tin. There was something of a lull in official geological work in the Colony, and A. C. Gregory, who was Aplin's successor as Government Geologist for South Queensland, was not appointed until 1875.

Some details of Aplin's tenure of office at Somerset, and his last days, have been provided by Austin (in press). The previous Police Magistrate, G. E. Dalrymple, had relinquished the post because of ill-health, and Aplin took up duty on 26th September, 1874. He died at Somerset less than one year later—on 9th September, 1875, after an illness of about two months. A short obituary appeared in *The Brisbane Courier*, fourteen days after his death. His wife remained in the settlement for a few months and then returned to Brisbane.

The official letters and reports written by Aplin from Somerset relate mainly to the conduct of the small settlement, with its attendant problems of the management of staff and stores, but they also include a substantial report on the pearl fisheries of Torres Strait. There was considerable pearling activity at the time—diving dress was being introduced in these waters, allowing the exploitation of deeper beds—and Aplin submitted some suggestions for possible legislative action to gain the Colony some revenue from the industry. He also recommended Thursday Island as the most suitable site for the new settlement in the area. His name is commemorated locally in Aplin Pass, the strait between Thursday Island and Hammond Island.

If the inscription quoted by Richards and Hedley (1925) is correct, then Aplin has suffered the injustice of having his name misspelt on the tombstone of his grave at the summit of Albany Island, just across the passage from Somerset. It reads

“CHRISTOPHER HAY D'OYLY APLIN, P.M.,

Government Resident of Somerset,

Formerly Collector of Customs and Surveyor-General of Labuan.

Formerly Government Geologist in Victoria, also in Southern Queensland.

Died 9th September, 1875, aged 56 years.”

So passed from the scene one, who, it cannot be claimed, was a dominating figure, but one whose public service with its several facets is worthy of remembrance.

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EXPLANATION OF PLATE XIV

Geological Map of Canal Creek, Thane's Creek, Talgai, and Lucky Valley Diggings. C. D'Oyly H. Aplin, 1869.